

A	Country	Indonesia	6 April 2005
B	Agency	FAO	
C	Lead agency sectors	Rehabilitation of agricultural production and fishery, food security	
D	Overall situation/ assessment	<ul style="list-style-type: none"> • An earthquake, with its epicentre in the channel between the islands of Nias and Simelu, occurred 28 March and has caused significant damage to both islands. There are unconfirmed figures of 200 casualties, 500 injured and 2 000 displaced persons. No formal assessments have been carried out so far. • The FAO office closest to the quake is in Meulaboh. It did not suffer any damage and its radio and security communications network is functioning. • The earthquake of 28 March hit the area where FAO had most inputs deliveries in the pipeline. • An estimated 40 000 ha of irrigated lands have been devastated (about 10 percent of irrigated lands). • 30 981 ha of the rice production is reported to be damaged. In the districts of Aceh Utara, Bireun, Pidie, Aceh Besar, Aceh Java, Aceh Barat and Nagan Raya a total of 90 350 ha have been destroyed (47 955 ha fish ponds and 30 981 ha paddy fields). • Immediate crop losses are estimated at 80 000 tonnes of unhusked rice and 160 000 tonnes of other crops. • Mud deposits, erosion, soil salinity and irrigation damage is estimated to cause permanent loss to 2 900 hectares of agricultural land. Some 17 500 ha are classified as having suffered severe damage, while 10 000 ha are listed as having sustained moderate damage and 7 100 ha suffered limited damage. • The damage was particularly heavy along unprotected sections of the coastline and extended as far as six kilometres inland through the river systems. • Current estimates indicate that as many as 92 000 farms and small agricultural enterprises have been partially or wholly destroyed. • Aerial surveys of damages to coastal aquaculture ponds along the coast indicate serious damages, ranging from 40 to 60 percent of the ponds in the various districts (worst hit is Bireuen). • The total damage to the irrigation infrastructure is estimated to US\$37.9 million in Aceh Province. • In addition to damages caused by the tsunami, flash floods in January have reportedly destroyed 21 793 ha of rice fields and 3 686 ha of maize crops in Lampung. 16 678 ha of rice fields were likewise destroyed in South Sumatra. • Scattered and unattended cattle, several of unknown ownership, since many of their owners also lost their life. The unattended livestock are presenting an increased health risk • It is estimated that 80 000 wells have been damaged, requiring repair or replacement. • Seawalls, flood ways and jetties have been severely damaged. Damages on flood control and sea wall systems are estimated at US\$ 72.1 million in Aceh and at US\$ 4.2 million to amend damages on flood control structures in North Sumatra. • 25 000 ha of mangroves have been affected at a total net loss of US \$118 million and an additional 48 925 ha of other forests have been affected at a net value loss of US\$ 21.9 million. Cleared away mangroves left the coastline vulnerable to the tsunami. • So far, the expansive forest cover of the Aceh province has suffered limited damage; although logging is 	

		<p>being re-allowed for the overall re-construction effort, it is vital that logging controls are maintained.</p> <ul style="list-style-type: none"> • Wood waste needs to be recycled as any large amounts would pose a risk of pest outbreaks. • Damages to coral reefs, land, water bodies and coastal lines are estimated as US\$448.9 million. • Small scale fisheries were the main economic activity in affected areas, and some 42 000 to 58 000 fishers and their families make their living from aquatic resources. • Estimates suggest that about 65 to 70 percent of the small scale fishing fleet and associated gear was destroyed in Aceh Province, representing around 9 500 units, of which 40 percent canoes, 25 percent with outboard motor, 35 percent with diesel inboard motor. In Nias Island preliminary estimates vary greatly and range from 240 to 800 destroyed fishing canoes. • 55 percent of the fishing harbours damaged (but none in Sabang) and 15 to 20 percent of fishers are estimated to have died in the 18 affected <i>kabupaten</i>s. However, in the northern part of the Aceh province (Kota Banda Aceh and Aceh Besar) a total of 8 500 fishers lost their lives, 64 percent of the pre-tsunami number. Around 45 government fisheries staff lost their lives. • In Aceh, almost all fish landing facilities were destroyed or damaged, among them 47 community landing centres. • Of the marine fish culture plants in Northern Sumatra, 1 000 cage farms have probably been destroyed. In Aceh, between 36 000 and 48 000 ha of brackish water aquaculture ponds that mainly produced shrimp and milkfish were seriously damaged. The Regional Centre for Brackish Water Development (BBAP) in Ujung Natee, reported that 80 percent of the ponds are destroyed and 17 shrimp hatcheries damaged. • Total damage to the capture fisheries sector is estimated at Rrp 478 billion (US\$ 52 million). Direct financial damage to brackish water culture pond production is estimated at Rrp 466 billion (US\$ 51 million), and around US\$ 8 million from damage to hatcheries and government facilities.
E	Response activities ongoing	<ul style="list-style-type: none"> • 30 March, a FAO team was mobilised in Medan and dispatched to Nias to carry out an initial damage assessment. • Preliminary assessments in crop and fishery sector for the preparation of FAO component to Flash Appeal completed. More detailed assessments to Aceh and Nias Island are underway. • A Memorandum of Understanding (MOU) between fisheries administration on province level has been drafted and is under review by local government fisheries and other concerned parties. • An in-depth assessment/formulation/implementation process has been initiated along the east coast of Northern Sumatra and a similar process will soon start on the west coast. • Project TSU-IND-05/A03-INDONESIA will provide sector specific technical expertise for damage/needs assessments and emergency planning to optimize effectiveness of aid for agriculture and fisheries. Detailed technical assessments are ongoing. Agriculture, fisheries and forestry sector working groups meet regularly with all major stakeholders in Banda Aceh, Meulaboh, Medan and Jakarta. • Projects TSU-IND-05/AO1, TSU-IND-05/A02 and TSU-IND-05/A03 will increase disrupted local productive capacity in agriculture and fisheries through emergency provision of material inputs, support services and training. Urgent material inputs (tools to measure contamination of soils) have been procured and delivered. Seeds, fertilizers, hand tractors, fishing gear, boats and engines are under procurement. Initial deliveries

		<p>will take place during coming weeks. Training regarding the decreasing of soil salinity is ongoing in several districts. Repairs of boats, clearing of fields, as well as drainage of canals and irrigation systems have been initiated.</p> <ul style="list-style-type: none"> TSU-IND-05/AO3 also intends to develop sustainable and broadly accepted rehabilitation and reconstruction plans. Facilitation of a broad public consultation process through thematic workshops has been initiated in Aceh and North Sumatra. FAO offers support to MMAF/MOA and other stakeholders to ensure that sector inputs are technically sound and in line with Government strategies.
F	Response activities completed	<ul style="list-style-type: none"> On February 5, FAO sponsored a meeting in Medan of the working group on Agriculture, Fisheries and Forestry. More than 70 delegates from ministries, international agencies and NGOs participated. The meeting was followed by a two-day workshop and one-day session of the working group on fisheries and agriculture, resulting in a draft for an overall strategy on recovery and rehabilitation. FAO was reconfirmed as the lead agency for fisheries and agriculture. A procurement plan for provision of inputs for the fisheries sector (tools and marine engines) for US\$ 1.1million has been developed. A procurement plan for agricultural inputs for the emergency phase of rehabilitation efforts has been completed, including a spending plan for US\$ 432 000 of inputs and US\$ 110 000 of contracts and training. Procurement items will include rice and vegetable seed, fertilizers, hand tools, hand tractors and threshers.
G	Planned activities	<ul style="list-style-type: none"> Formulation, within an integrated land and coastal ecosystem management plan, of a comprehensive plan for the rehabilitation of affected forests and mangroves. Technical assistance to the Indonesian authorities to facilitate the provision of agricultural/fishery extension services to 60 000 disaster affected households. The next generation, children survivors of the Tsunami should be given specific educational materials in coastal ecology, tsunami response, sustainable fisheries and aquaculture.
H	Major constraints	<ul style="list-style-type: none"> The west coast of Sumatra is extremely hard hit. Entire communities have been devastated so immediate rehabilitation of livelihoods is presently not a realistic option for this region. Furthermore, access to and mobility within these areas is extremely difficult. The east coast has full road access from Banda Aceh and Medan, while most of the west coast is accessible only by boat or air. The main access road to the Western districts runs along the coastal line and has been cut off at a number of locations due to coastal erosion and fallen bridges. The mode of access is still limited to helicopters or boats. The provincial animal husbandry and veterinary services have been almost totally destroyed. In Banda Aceh a high percentage of staff seems to have lost their lives, many of the survivors are too deeply traumatized to be operational. A substantial part of the population in the afflicted areas keeps moving around, making it hard to provide water and sanitation for them, as well as initiating rehabilitation of fisheries and agriculture. The high number of internationals in Sumatra is not sustainable and could lead to tensions in the local communities. A streamlined strategy/work plan must be presented to the authorities on behalf of all

		international actors on the ground.
I	Funding requirements	<p>US\$ 10 million are needed of which</p> <ul style="list-style-type: none"> • US\$ 5 million to provide 25 000 of the most affected families and additional 25 000 families hosting displaced persons with seeds, tools and other agricultural inputs for rapid rehabilitation of food crop production; • US\$ 4 million to provide 25 000 fishers with inputs to restart fishing activities and support initial repair works on fish ponds; • US\$ 1 million for technical assistance to facilitate coordination and provision of extension services. <p>US\$ 3 508 288 have been received so far.</p>
J	Key partners / coordination	<ul style="list-style-type: none"> • The Ministry of Marine Affairs and Fisheries and the Ministry of Agriculture
K	Staff presence	<p>René Suter, Tsunami Liaison and Coordination Officer (Jakarta), reneernst.suter@fao.org,</p> <ul style="list-style-type: none"> • Two master fishermen, one fisheries advisor, two aquaculture experts and one harbour expert have been fielded. • An emergency coordination office is being established in Aceh. • Two emergency coordinators and one agronomist have been fielded.

Country	Maldives	6 April 2005
Agency	FAO	
Lead agency sectors	Rehabilitation of agricultural production and fisheries, food security	
Overall situation/ assessment	<ul style="list-style-type: none"> • 12 000 persons (5 percent of the population) have been displaced from their islands and another 8 500 people are temporarily relocated to other islands in the Maldives. All are in urgent need to re-establish their livelihoods. • The fisheries sector (that contributed to 9.3 percent of GDP) is seriously affected. A third of the annual catch is consumed domestically, fish products account for almost half of the exports. About 20 percent of the total population is dependent on fisheries as the major income earning activity. • Economic losses will be most severe for artisan, small-scale fishers and processors. Many have temporarily left their islands after losing not only boats and gear, but also houses and savings (most kept all assets in their homes, rarely using banking facilities). The peak of the fishing season is January – April. • Direct losses to fisheries are 120 fully damaged and lost fishing vessels, 50 partially damaged vessels (22 are out of operation), lost equipment of 337 cottage fish processors and 37 commercial processors. • Estimated total cost for repair and rehabilitation for damages to fisheries industry amounts to about US\$ 25 million. Direct losses (vessels gear and infrastructure) estimated at US\$ 13.13 million. Indirect losses (mainly livelihoods and productive assets for artisan fishers) estimated to US\$ 11.87 million. Damages to the fisheries sector, including business losses, have been assessed as US\$ 25 million (US\$ 11.5 million for fishing vessels and US\$ 12 million business interruption) while the cost of rehabilitation has been assessed as US\$ 15.3 million. • 30 percent of the field plots have been completely destroyed. Field crops in 2 103 farms have been damaged, as well as backyard crops and agricultural tools in 11 678 homesteads. • Severely affected atolls and islands (Thaa, Hhaalu, Vaavu, Gaafu, Alifu and Laamu) report contamination of water and/or salinity of water. • 50 percent of the field plots have been destroyed due to saline water flood, causing loss of perennial plants and crop failure. Saltwater intruded into fresh water lenses on almost all of the 1 200 islands, resulting in vegetation browning and dieback. • Perennial trees such as coconuts, breadfruits, mango etc. have been uprooted and/or are suffering from salt toxicity. Particularly bananas have been severely damaged. 700 000 fruit trees and 840 000 timber trees have been damaged in the inhabited islands. These losses affect 11 678 households. • High demand for wood for reconstruction of infrastructure poses risk of triggering unsustainable harvesting of forests. • Wood waste needs to be properly managed as any large amount poses a risk of pest outbreaks. • Perturbation of water aquifers, sea salt sediments, and salt logging constitute big threats to agriculture and water supply. Saline water intrusion has affected 112 inhabited islands and damage to groundwater resources is severe in 35 agricultural islands. • Recovery needs for the agricultural sector (improvement of soil, forestry and water resources, import of plant material and provision of extension services) are estimated at US\$ 11.1 million. 	

Response activities completed	<ul style="list-style-type: none"> A fisheries and agriculture mission carried out damage and needs assessments. The reports have been used to launch an appeal for financial support to 13 islands categorized as the most affected (categories 1-2). FAO has fielded a representative (ad interim) in February to establish FAO's presence in the Maldives. A programme/operations officer has been fielded to assist the FAO representative in the implementation of four emergency projects and to identify needs for further FAO interventions. An expert has developed a technical and financial information matrix on projects and project proposals (short and medium), identifying funding gaps. <p>FISHERIES</p> <ul style="list-style-type: none"> An international fisheries advisor arrived to assist the Ministry of Fisheries, Agriculture and Marine Resources (MAFMR) to co-ordinate and supervise emergency and rehabilitation assessments of the fisheries sector, as well as to offer support to the structuring and planning for the recovery phase. He has undertaken necessary field trips and is assisting the Ministry in the design of a full work plan for the post-tsunami recovery programme. Damage assessment of 65 fishing boats has been completed. The cost for repairing 75 boats has been validated. Evaluation of bids for the construction of 10 (out of 50) 85 feet (26 metres) FRP (fibreglass reinforced plastic) boats was completed and submitted to MFAMAR and under consideration by the Government procurement system. A boat building expert has been fielded to assist the government in repairing damaged vessels and in the construction of small boats. Evaluation of bids for building 89 <i>bokkura</i> (small fishing boats) has been completed. A recent FAO conducted field mission suggested the construction of a 4.5 bokkura prototype in FRP as being more advisable than the formerly proposed 3.5 meters wooden bokkuras. Estimates for the costs of such a FRP prototype are completed and procurement has to be reconciled. Negotiations are conducted with the Government following the new regulations from the Disaster Relief Centre. A post harvest plan has been designed and provided to the Ministry of Fisheries by the expert in fish processing. Needs have been identified and quantified. Draft project proposal has been suggested and submitted to MAFMR for the installation of 4 (out of 10) ice plants to be established in different atolls. <p>AGRICULTURE</p> <ul style="list-style-type: none"> Soil salinity and water resources experts have conducted an assessment mission and presented their findings to the Minister. The expert in soil salinity control offered assistance in desalination and reclamation of agricultural soil. He has also addressed issues related to the appropriate way of dealing with salinity and designed a capacity building programme to strengthen staff skills within the Ministry. An expert in water resources has been fielded to tsunami afflicted areas to conduct damage assessment of the water table. Since water is a cross cutting issue, FAO initiated a United Nations Country Team (UNCT) wrap up to inform the other organizations of issues related to water salinity.
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	<ul style="list-style-type: none"> • Training on the use of salinity meters and interpretation of results has been provided to senior officers and staff within the agricultural research centre. Specifications for agriculture inputs have been provided to the procurement mission and bidding has been launched. • 150 packets of 13 different varieties of vegetable seeds sufficient for 10 islands have been delivered: tomato, snake gourd, eggplant, radish, capsicum, cabbage, chillies, cucumber, spinach, papaya, watermelon). • 15 salinity meters have been provided to the Ministry of Agriculture. • A joint UNCT public announcement message(FAO, UNDP, UNEP) has been carried out to address the impact of the tsunami on water tables and appropriate measures to be taken by the farmers has been prepared and sent to MFAMR for clearance and broadcasting • Collection of information of suppliers (local and international) for agriculture inputs procurement has been completed. <p>TECHNICAL SUPPORT TO THE FAO OFFICE MALDIVES</p> <ul style="list-style-type: none"> • An IT officer from FAO Regional Office for Asia/Pacific has assisted in the setting up of network connections at the new FAO Maldives Office, which is now fully operational. • A senior officer from FAO's head-quarter's AFF (Decentralization Accounting and Budget) has established an accounting and reporting system to enable the FAO Field office to operate financial transactions. He has also provided on-job training to recently recruited national staff. <p>FUND RAISING :</p> <ul style="list-style-type: none"> • Request submitted to OCHA for allocation of unearmarked funds. • US\$ 1 million approved for the project TSU-MDV-05/ER/102- Maldives. • Submission of Mid-Term Review (FAO MD) and revision of the budget of the flash appeal to OCHA. • Based on recent assessments carried out for agriculture and fisheries, FAO has revised its initial Flash Appeal request for the Maldives from US\$ 2 million to US\$ 8.9 million.
Response activities ongoing	<ul style="list-style-type: none"> • Based on the joint donor's assessment the Government will seek assistance through a Donor Conference tentatively scheduled in March 2005. FAO, AusAid, Kuwait Fund and Asian Development Bank have shown keen interest in participating in the recovery programme. • A naval architect and a fishery advisor are conducting cross-checking on the cost of boat repair on the Baa Atoll, conferring with local fisher communities. • The bidding for construction of 88 bokkura (small boats) is under way. • Repair of 100 damaged boats scattered in the 13 most affected areas has commenced. • Bidding for fishing gear has been launched. • Bidding for vegetable seeds launched. • Bidding for organic and inorganic fertiliser launched. • Ongoing procurement for local hand tools • Ongoing procurement for cuttings and seedlings.

Planned activities	<ul style="list-style-type: none"> • Reclamation of affected agricultural land. • Repair and replacement of assets within the fisheries sector (boats, fishing gear and onshore supporting facilities). • An international naval architect will arrive to assist the Fisheries sector on designing and construction of boats. • Formulation, within an integrated land and coastal ecosystem management plan, of a comprehensive plan for the rehabilitation of affected forests and mangroves. • A FAO expert in agriculture will be fielded to assist the agriculture sector on preparation of agricultural calendar and use of tsunami inputs. • Signing of the projects documents and starting of the implementation of the tsunami projects.
Major constraints	<ul style="list-style-type: none"> • Population dispersion over 200 islands scattered over 900 km complicates assessment and rehabilitation efforts. <p>The Ministry of Planning and National development organisations have identified the 69 most affected islands.</p> <ul style="list-style-type: none"> • The extension services of the Ministry of Agriculture needs to be drastically reinforced during a transitory period in order to cope with the needs for rebuilding agriculture and home gardening in the numerous disseminated islands. • Procurement of inputs has been delayed. The Government of Maldives has designed a tsunami relief fund and a set of procurement rules and has asked FAO to follow these procurement rules. While the FAOR is trying to clarify this matter with the Government, ongoing procurement has been halted. • Four 4 emergency projects await Government signature. • High cost for the handling and distribution of inputs is a major constraint which need to be addressed • It has been estimated that there is a need of US\$ 115.000 for the distribution of agriculture inputs to the affected islands. • Lack of sufficient and well trained staff within the different ministries. • Difficulty to get the qualified national consultants to fulfil the consultants positions • Absence of clear criteria for differentiation of vulnerable groups.
Funding requirements	<ul style="list-style-type: none"> • FAO appealed for US\$ 2 million in the January Flash Appeal. Up to date US\$ 1 million has been secured under 4 emergency projects for agriculture and fisheries. • US\$ 3 670 000 are needed to start rehabilitation of the marine fisheries sector by replacing or repairing small fishing boats and gear and support to the agricultural sector • US\$ 3 000 000 are needed to complete the asset for replacement submitted by the agriculture sector and to boost the agricultural productivity (submitted to OCHA). • US\$ 150 000 needed for rehabilitation of the forest sector (submitted to OCHA). • US\$ 146 000 needed for Geographical Information System and infrastructure (submitted to OCHA).
Key partners/ coordination	The Ministry of Fisheries, Agriculture and Marine Resources (MFAMR)
Staff presence	<ul style="list-style-type: none"> • A FAO office has been set up in Male, capital of the Maldives, and is now fully operational (tel. +96 0 340789)

	<ul style="list-style-type: none">• Since February a FAO representative (ad interim) is present.• An emergency operations officer has been fielded and is assisting the FAO representative in the Coordination of Emergency programmes and operations.• One fisheries advisor expert has been fielded.• One master boat builder has been fielded.• One expert on reef assessment is under consideration.• One senior financial staff from FAO HQ (AFF) has been fielded to set up the financial /accounting systems which will enable the FAO field office to operate directly and to speed up the delivery.• One local staff in charge of secretariat has been recruited.• One local staff in charge of administration and finances has been recruited and trained by the Senior Financial officer on accounting.
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A	Country	Myanmar	6 April 2005
B	Agency	FAO	
C	Lead agency sectors	Rehabilitation of agricultural production and fisheries, food security	
D	Overall situation/ assessment	<ul style="list-style-type: none"> Some 200 villages spread over the southern coast and relying on fisheries activities were hard hit by losses due to damage on vessels, fishing gears, infrastructure, etc. Government figures suggest that there were 61 deaths and 3 205 people from 638 households displaced. A total of 144 small vessels have been damaged. 99 boats were lost. Seasonal fishing villages and so called sea gypsies are communities of particular concern. Hard hit was the Laputta Township in the Ayeyawaddy Division, and Pyinsalu Subtownship, about 40km south of Laputta with more than 900 fishermen impacted. Laputta was worst hit, with 25 dead and 240 affected households (1 563 persons). The effects of the tsunami are apparently not as grave as initially feared. The tsunami hit during low tide and was apparently mitigated by a large number of reefs and island, before it reached the shoreline, furthermore it was a full-moon day meaning that many fishermen were not out at sea. The livelihood of the affected people was mainly fishing (95 percent). The fishers do fishing in the dry season and farming in the rainy season. In the most affected areas the wave did not go more than 200 metres inland. 770 livestock (18 buffalos and 19 cattle) were lost. Direct financial damage is estimated at US\$ 180 000 to 250 000 	
E	Response activities completed	<ul style="list-style-type: none"> FAO participated in a nine-member inter-agency assessment mission, carrying emergency needs assessment just after the event. FAO also fielded a mission to Kawthaung Township to assess losses in the agriculture and fisheries sectors, since previous missions have not covered these sectors. FAO, including a fisheries consultant, has participated in the preparation of a country profile for mid- and long-term donor assistance. 	
F	Response activities ongoing	<ul style="list-style-type: none"> FAO has designed a project to assist (in close collaboration with UNDP) the affected fishing communities (fishers cum farmers and homestead gardeners) with a package of improved and adaptable technology; fishing boats and gear, technical guidance, training and supervision, as well as agricultural inputs such as seeds, seedlings, fertilizers and hand tools. The project would be carried out during March - August 2005 and the estimated cost is US\$ 404 000. 	
G	Planned Activities	<ul style="list-style-type: none"> FAO will participate in medium- and long-term recovery and rehabilitation activities in agriculture and fisheries. A national consultant, one assistant and one driver will be recruited to work in close collaboration with UNDP personnel and it is also envisaged that an NGO will be contracted to assist in the service delivery. A need assessment team with two national consultants (one for agriculture and one for fisheries) will go to Kaw Thung and Rahkine to conduct assessments in agriculture and fisheries sub-sectors. 	

		<ul style="list-style-type: none"> The forestry sub-sector will be included in needs assessments planned for the immediate future. FAO is closely collaborating with the Tsunami Assistance Coordination Group of Myanmar.
H	Key partners/ coordination	Ministry of Livestock and Fisheries and Ministry of Agriculture and Irrigation
I	Major constraints	<ul style="list-style-type: none"> The tsunami affected areas are located at the shoreline and not easily accessible. The rainy season will commence around the 2nd or 3rd week of May and might hinder transportation and communication.
J	Funding requirements	<ul style="list-style-type: none"> US\$ 404 000 are needed for provision fishing boats and gear, technical guidance, training and supervision, as well as agricultural inputs such as seeds, seedlings, fertilizers and hand tools. So far no funds have been received.
K	Staff presence	Staff will be recruited ASAP after signing a Letter of Agreement with UNDP.

A	Country	Seychelles	6 April 2005
B	Agency	FAO	
C	Lead agency sectors	Rehabilitation of agricultural production and fisheries, food security	
D	Overall situation/ assessment	<ul style="list-style-type: none"> • Severe damage estimated US\$ 30 million to fishing ports, roads, bridges and public utilities. • Although small in comparative terms with other tsunami struck countries, the calamity has been disastrous for the small and vulnerable economy of the Seychelles. • Coastal farms and the artisanal fishing sector suffered extensively. 92 fishing vessels (27 percent of the artisanal fleet) were damaged and at least 15 vessels sunk. The total cost of the damages and losses to fishing fleet is estimated to be between US\$ 909 000. The two fish processing plants and cold storage facilities located in the Fishing Port in Victoria were also affected. • Damages to the entire fisheries sector (including harbour infrastructure and port services) are estimated to over US\$ 6 million. The fisheries sector is the major source of foreign exchange for the country. • 8 percent of the agricultural sector (31 farms out of a total of 400) has been put out of production. • Destabilisation and death of trees of economic value, like coconut and mango, have been widespread. Damages have been caused by tsunami impact and prolonged presence of sea water. • Mud streams affected badly the coral reefs of three of the most protected Marine ecosystems (St Anne Marine Park, Curieuse Marine Park and Silhouette Marine Park). • Damages were further compounded by disastrous effects of torrential rain and stormy weather that followed the Tsunami for a period of about 14 days, resulting in land slides, rockfall and serious soil erosion. • Total costs of the environmental rehabilitation programme are estimated a US\$ 1.5 million, of which US\$ 808 000 for coastal rehabilitation. 	
E	Response activities completed		
F	Response activities ongoing	FAO is monitoring the situation through a national correspondent reporting to FAO's office in Antananarivo, Madagascar.	
G	Planned activities	<ul style="list-style-type: none"> • Rehabilitation and restoration of sustainable livelihoods in the agriculture and fishery sectors. • Repair and replacement of fishing vessels and landing facilities. 	
H	Key partners/ coordination		
I	Major constraints		
J	Funding requirements	<ul style="list-style-type: none"> • US\$ 2.5 million are needed to start rehabilitation of the marine fisheries sector by repairing or replacing small fishing boats and gear. • US\$ 25 000 have been received. 	
K	Staff presence	National experts are being recruited for further in-depth damage assessment	

A	Country	Somalia	6 April 2005
B	Agency	FAO	
C	Lead agency sectors	Rehabilitation of agricultural production and fisheries, food security	
D	Overall situation/ assessment	<ul style="list-style-type: none"> “The Tsunami Interagency Mission - Coastal Communities in North East Somalia” estimates that 50 percent of the assessed population (22 000 people) will require sustained resource transfers in the form of food and/or cash assistance until the next fishing season in October 2005, in order to access basic food needs and alleviate severe financial pressures due to reduced fishing income. This is based on the contingency that fishers have access to fishing equipment for the October season. Main findings of the mission indicate that about 2 000 concrete structures, of which 1 400 houses, were destroyed or severely damaged. Hafun stands out as being the most devastated village, with the majority of its infrastructure destroyed. Nearly 300 Somalis are known to have died. An estimated number of just over 600 boats were lost or destroyed. An estimated 75 percent of the fishing gear has been lost or damaged beyond repair. 5 percent of the total population from Hafun to Gara'ad (around 2 300 persons) have been classified as finding themselves in a “Humanitarian Emergency” situation and 40 percent of the total population (17 000 persons) are encountering a “Livelihood Crisis”. These classifications are based on a Food and Livelihood Security Classification developed for the Tsunami context. Existing emergency responses in the form of health, water, shelter, non-food items and food have largely met the immediate humanitarian needs. Contextually, the Northeast region as a whole has been affected by six different shocks over the past years (drought, floods, freezing temperatures, continued livestock ban, civil tension, and the tsunami), straining social support mechanisms and damping the regional economy. 	
E	Response activities completed	Assessment teams have been mobilized and provided their reports.	
F	Response activities ongoing	<ul style="list-style-type: none"> FAO is <i>inter alia</i> participating through the FAO Food Security Assessment Unit (FSAU), which conducted a post-“deyr-season” assessment. The report has been released 2 March, 2005. A FAO fisheries team has assisted the Government with detailed damage assessments in remote areas and relief programmes for the fisheries sector. A Somali language version of the FSAU monthly food security brief was launched in February 2005 and continues to be issued on a monthly basis. Positive feedback has been received from donors, partners, authorities and Somali communities. 	
G	Planned activities	<ul style="list-style-type: none"> Support to fishers in six southern provinces was given by providing essential fisheries inputs and the rehabilitation of damaged vessels. 2000 fishers will be targeted through the provision of cash, boats, equipment and training on improved 	

		<p>fishing techniques and boatbuilding.</p> <ul style="list-style-type: none"> • FSAU will launch monthly market and climate update publications, beginning in April 2005. • In April 2005, FSAU will launch a project website. • An "Interagency Tsunami Emergency Assessment Mission Report" will be released in April 2005.
H	Key partners/ coordination	
I	Major constraints	Remoteness of many coastal communities and poor communication infra structure, combined with limited presence of implementing partners' increases difficulties in providing assistance to affected areas.
J	Funding requirements	<ul style="list-style-type: none"> • US\$ 2 million are needed to assist 2 000 fishers through the provision/repair of fishing boats and equipment and for training in improved fishing techniques and boat construction. • So far US\$ 486 000 have been received from Norway, US\$ 425 000 have been allocated by OCHA and € 900 000 have been committed by Italy. Essentially, the Flash Appeal for Somalia is thus fully funded.
K	Staff presence	A FAO Food Security Assessment Unit (FSAU) has established a tsunami task force consisting of international and national experts in the crop and fishery sector.

A	Country	Sri Lanka	6 April 2005
B	Agency	FAO	
C	Lead agency sectors	Rehabilitation of agricultural production and fisheries, food security	
D	Overall situation/ assessment	<ul style="list-style-type: none"> • Waves penetrated on average 0.5 km, impacting only downstream parts of the main agricultural areas. However, recent assessments in the Galle district indicate that damage can be worse than initially thought. Salt water moved more than three kilometres inland, among other damages causing the deaths of a large number of mango- and jackfruit trees. • 3 629 ha of rice, 645 ha of other field crop, 213 ha of vegetable farms and 315 ha of fruit trees were completely damaged. Worst affected districts are Hambantota, Ampara, Batticaloa, Trincomalee, Mullaitivu and Jaffna. • An additional 5 000 ha of agricultural land made ready for cultivation was affected by sea-water intrusion. The Maha season harvest period for rice is January to March. The Yala planting season runs from March to early May with harvest in July – September. • 27 710 units of home gardens were destroyed, equivalent of 5 213 hectares of land. Given that these gardens are both major nutritional sources as well as providing small incomes their loss poses a considerable threat to the nutrition of a vast number of poor families living along the coast. These home gardens represent more than 50 percent of the crop losses. • Direct loss of food production is estimated at US\$ 17 million. • The Government estimates funding needs for the Yala season to be approximately 273 tonnes of different varieties of paddy), more than a thousand tonnes of fertiliser worth around US\$ 250 000 and relatively small amounts of vegetable seeds. FAO is actively seeking funding to cover these needs. • Coastal agro wells in the East and natural streams have been infected by salt water • Pasteurizing machines and marketing centres were washed away by the tsunami. • A drop from 18 kg to 13.5 kg is calculated for per capita consumption of fish. • Total fish production loss is estimated at 81 000 tonnes, or 28 percent. • The mangroves, coastal lagoons and coral reefs acted as protection/buffer zones, lessening tsunami impacts. • The fisher population suffered 7 573 deaths. Nearly 71 000 persons in fishing households have been directly affected through death, or displacement due to damage to their dwellings. • A new preliminary assessment found that a total of 54 percent of the fishing fleet of 31 663 boats was affected by the tsunami. 39 percent, or 12 438 boats, was totally destroyed, while 13 percent were severely damaged. This number is less than previously reported due to initial overestimates from fishers. • The cost of boat repair and replacement in the short-term is now estimated to amount to approximately US\$ 18 million. The total immediate need for replacement and repair of damaged fishing craft and gear is approximately of US\$ 19 million. • High demand for wood for reconstruction of infrastructure poses risk of triggering unsustainable harvesting of forests. 	

		<ul style="list-style-type: none"> Repair, rehabilitation and improvements related to environmental damages are estimated at US\$ 75 million.
E	Response activities completed	<ul style="list-style-type: none"> FAO has been selected by the Government and by the WB/ADB/JBIC/JICA Needs Assessment Group to be the official coordinator of fisheries in Sri Lanka. FAO has instituted regular NGO/Donor Coordination Meetings in the fisheries and agricultural sectors. A joint FAO – Ministry of Fisheries Working Group on fisheries sector rehabilitation has been established to coordinate relief efforts for the fisheries sector. FAO has established a joint working group in the Ministry of Agriculture, Livestock, Lands and Irrigation An FAO mission on land tenure has been completed. Preliminary reports have been completed. On 2 February, the first of a US\$ 380 000 consignment of boat repair kits to help restore the livelihoods of thousands of Sri Lankan fishermen was delivered to the Ministry of Fisheries. The repair kits will go to boat yards set up around the country by the Sri Lankan government to repair those vessels salvaged by the surviving fishermen through its association with CeyNor and major engine suppliers. FAO has drawn up and distributed detailed specifications for fishing gear for NGOs buying such equipment in the different regions of Sri Lanka. FAO has produced 28 MT of Rice Registered Seed. A 425 MT Rice Certified Seed has been already produced already. These will be distributed to more than 10,000 vulnerable farmers in the conflict affected region of the North. 14 810 Crocodile brand hand tools worth of US\$ 56,000 were donated by Ralph Martindale (England) Limited to FAO to be distributed to Tsunami affected farmers through the Ministry of Agriculture.
F	Response activities ongoing	<ul style="list-style-type: none"> On Friday 18 March, FAO signed a contract with CeyNor for an amount of US\$ 325 203. The FAO package drafted with state-owned boatyard CeyNor covers government costs for rolling out repairs for up to 2650 boats and 3350 engines (inboard and outboard). Up to 4 April 2005, CeyNor has repaired 351 Multi-day boats, 1012 outboard motor boat, 651 outboard engines and 1561 traditional boats in the districts of Gampaha, Kalutara, Colombo, Galle, Matara, Hambantota, Ampara, Batticaloa, and Trincomalee. FAO has ordered around 50,000 fishing nets to be distributed to affected fishermen in the affected districts. 741 nets are being distributed in Hambantota district with the support of the MFAR. Training programmes have been initiated in Vavuniya, Batticaloa and Matara to train extension staff in the use of pH meters and electrical conductivity meters provided by FAO. The pH meters are used to detect changes in the alkalinity and acidity of the soil whilst electrical conductivity indicates the level of salinity. Eighteen tenders were issued for approximately US\$ 9.8 million to cover fishing gear, outboard engines and spare parts, repair materials for boats, inboard engine spare parts, vehicles, motorcycles, and office and communication equipment. Of this, orders up to approximately US\$ 3.6 million have been placed with local and regional suppliers. Guidelines and a local plan for fisheries rehabilitation are being prepared.
G	Planned Activities	<ul style="list-style-type: none"> Rehabilitation of fishery harbours, anchorages and production related infrastructure. Formulation, within an integrated land and coastal ecosystem management plan, of a comprehensive plan for the rehabilitation of affected forests and mangroves.

H	Major constraints	Due to high demand in the market for certain items (e.g. new outboard engines, nets) delivery time can take up to several months
I	Key partners/ coordination	<ul style="list-style-type: none"> • Department of Agriculture and Department of Animal Husbandry and Livestock. • Department of Fisheries and Ceylon Fishery Harbours Cooperation and Ceylon Fisheries Corporation. • Local CBOs and NGOs, relevant state agencies and provincial councils.
J	Funding requirements	<p>US\$ 39 950 000 are needed of which:</p> <ul style="list-style-type: none"> • US\$ 13,4 million to replace or repair boats, engines and fishing gear; • US\$ 10 million for repair and rehabilitation of fishing harbours and other production related infrastructure; • US\$ 10 million for provision of basic farming inputs to affected households, and to support the reclamation of damaged agricultural land and assist in land titling and registration; • US\$ 1.5 million for technical assistance to facilitate coordination and provision of extension services; • US\$ 2 million to assess and rehabilitate damaged mangrove and coastal plantations; • US\$ 3 million for emergency re-stocking and improvement of poultry goats and dairy cows; • US\$ 50 000 for crop and food assessment mission; <p>US\$ 12 590 819 has been received so far.</p>
K	Staff presence	<ul style="list-style-type: none"> • Mona Chaya, Emergency and Rehabilitation Coordinator. Email mona.chaya@fao.org • Recruited international staff include: a Fisheries Advisor, a Naval Architect, a Master Fisherman, an Agricultural Advisor an Information/Communications Officer and two Programme Officers. • A senior national agronomist has been seconded to the Tsunami programme. • In the fisheries sector, national staff include, a Fishery sector expert, a Development Planner, an Institutional Expert), a Fisheries Gear Expert, a Marketing/Post-harvest Expert, a Boat Repair specialist, three Marine Engineers and two Fishing Gear Assistants and a Coast Conservation Specialist.

A	Country	Thailand	6 April 2005
B	Agency	FAO	
C	Lead agency sectors	Rehabilitation of agricultural production and fisheries, food security	
D	Overall situation/ assessment	<ul style="list-style-type: none"> • Estimates indicate that 2 923 fisheries households were affected and damages on fisheries alone would amount to US\$ 16.6 million • Some 5 397 fishing boats were either damaged or totally wrecked, with 75 percent being small-scale fishing boats. • Damage to aquaculture floating cages has been estimated as probably less than US\$ 32.7 million, with a total of about 1.1 million square metres (or 41 439 cages) for marine fish culture, 30 ha) of shrimp farms and approximately 70 ha of shellfish area being damaged. The damage is expected to drive Thai shrimp exports down by 75 000 to 80 000 MT this year. • Minor damages to crops. Some 1 300 hectares of land became covered by sea water, of which 900 hectares were damaged. • It is reported that there were 74 affected sub-districts and a total of 386 villages lost for fisheries and/or aquaculture. Several households have also lost heads of families. Many farmers have lost much of their tools, equipments and livestock. 4 889 farmers have lost or had damage to their animals. • 8 harbours are severely damaged. • At least 5.9 sq km of coral reef and 3.9 sq km of mangroves have been damaged. • 1 300 ha of land became covered by sea water, of which 900 ha were damaged. Wells and streams have been infected by dead bodies and saltwater, but no information is yet available on water quality in wells and natural streams. 	
E	Response Activities completed	<ul style="list-style-type: none"> • A joint Ministry of Agriculture and Cooperatives (MOAC)/FAO Detailed Technical Damage and Needs Assessment Mission in fisheries and agriculture/livestock sector were fielded from 11 to 24 January and the report is being finalized. • Regional consortium on fisheries sector has been established in collaboration with other regional organizations for the coordination of fisheries and livelihood recovery programme. • FAO RAP has organized two regional workshops in Bangkok aiming to enhance collaboration and coordination, as well as identifying a strategic framework for the medium- and long-term tsunami rehabilitation in the region, including Thailand. • “Regional Workshop on Rehabilitation of Fisheries and Aquaculture in Coastal Communities in Tsunami-affected Countries in Asia” (28 February – 1 March 2005). • “Regional Coordination Workshop on Rehabilitation of Tsunami-affected Forest Ecosystems: Strategies and New Directions” (7 – 8 March 2005). • The funds of Japanese Trust Fund project, OSRO/THA/501/JPN (US\$ 162 000) and OSRO/THA/502/JPN (US\$ 77 000), have been fully utilized, and all procurement and input deliveries have been carried out to beneficiaries. 	

F	Response Activities ongoing	<ul style="list-style-type: none"> As part of the UN country team, FAO is assisting the Government in the assessment and coordination of its relief efforts. A fisheries expert assists the Government with damage assessments. TCP/THA/3004 (E) "Emergency Assistance to Support the Rehabilitation in Earthquake /tsunami-affected Areas" (US\$ 400 000) is approved and cleared, procurement action is in process. Inputs have been procured and will be delivered shortly, pending identification and certification of beneficiaries. Collaboration with the NGO network has been arranged to identify and certify beneficiaries, as well as providing training and distributing inputs. Purchase requests for US\$ 141 750 worth of plants and seeds are being processed. Purchase requests for US\$ 321 000 worth of fishery supplies are being processed.
G	Planned Activities	<ul style="list-style-type: none"> Under TCP/THA/3004 (E), OSRO/THA/501/JPN and OSRO/THA/502/JPN, fisheries inputs as well as agriculture/livestock inputs will be delivered to beneficiaries in March along with technical advisory services and training. The Italian and Greek Trust Fund projects are being prepared. 31 March to 1 April, FAO RAP is organizing a workshop in Bangkok: "Regional Workshop on Salt-affected Soils from Sea Water Intrusion: Strategies for Rehabilitation and Management".
H	Key partners/ coordination	<ul style="list-style-type: none"> Ministry of Agriculture and Cooperatives (MOAC) Department of Agricultural Extension Department of Fisheries Department of Livestock Development Regional organizations based in Bangkok such as SEAFDEC, NACA, APDC and BOBP. Local CBOs and NGOs, relevant state agencies, other UN agencies and provincial governments
I	Major constraints	For several reasons, estimates indicated in FAO reports tend to differ from those presented in government sources. For example, the fact that several aquaculture installations have not been reported to the authorities (and thus are illegal) may have led to under-reporting of damages, on the other hand - unfounded claims for compensation may have led to over-reporting of damages.
J	Funding requirements	<ul style="list-style-type: none"> In partnership with UNDP and UNEP, US\$ 2.5 million are needed by FAO to assist farmers and fishers, as well as to assess environmental damage and needs for rehabilitation of natural resources. US\$ 636 601 have been received and additional US\$ 1.95 million have been pledged by donors (Italy and Greece).
K	Staff presence	<ul style="list-style-type: none"> One regional coordinator One officer-in-charge of monitoring and evaluation. One national consultant in charge of coordination of TCP, as well as Trust Fund projects. Three national consultants (one team leader, one fisheries expert and one agronomist) are being recruited (under TCP/THA/3004)